

PROSPECTUS

Research at the Interface of the Life and Physical Sciences: Bridging the Sciences

Background: In recognition of the importance of research at the interface of the life and physical sciences, language in the FY2004 House Appropriations Report suggested that the NIH and NSF convene a conference of agencies in the Federal government whose missions involve the conduct or support of research in the physical sciences and the life sciences to discuss how research at the interface can be strengthened. On May 10, 2004, an “Interagency Workshop on Research at the Interface of the Life and Physical Sciences” (<http://www.nibib1.nih.gov/events/interagency/index.htm>) was held in response to the language. This conference is the result of a recommendation from the May 10 workshop that a meeting of scientific researchers be held with the goal of obtaining community input on how to effectively bridge the life and physical sciences.

Objectives: The objectives of this conference are to identify (1) the highest priority questions that will ultimately require the combined application of the life and physical sciences to answer and (2) approaches for effectively bridging the sciences. With regard to the second objective, issues to be addressed include (1) major issues or impediments to bridging the sciences; (2) actions that will effectively promote progress at the interface; (3) criteria for evaluating associated research proposals; (4) metrics to determine the impact and efficacy of research initiatives; and (4) challenges in the workforce, education, and the current research/funding paradigm for making sustained advances at the scientific interface.

Participants: Attendance will be open to interested scientists up to a limit of 150 total attendees. A core of 25-30 invited extramural scientists from a broad spectrum of life, physical and mathematical, and interface sciences will serve as primary discussants to address the objectives. Representatives from appropriate Federal agencies will also attend and participate as agency resources.

Format: The conference will be a one-day, completely interactive (no formal presentations) meeting. The agenda will consist of plenary and breakout sessions aimed at addressing the objectives and developing recommendations. The meeting will be chaired by three extramural scientists.

Product: A detailed report describing the program and results of the conference will be prepared and posted on the Internet. A paper describing the most significant grand challenges and recommendations will be prepared and published in the literature.

Date and Location: November 9 – Holiday Inn Select Hotel, Bethesda, Maryland

Agency Coordinators: Dr. Richard Swaja (NIH/NIBIB) and Dr. Bruce Hamilton (NSF)